

ABSTRACT OF THE DISCLOSURE

The sensitivity of scattered-light fire detectors for small particles can be increased substantially when blue light is introduced into the measuring volume in addition to an infrared radiation and the scattered radiation produced by the particles is measured and evaluated separately from each other in the infrared and blue region both in the forward scattering region as well as in the backward scattering region. This can be realized by a fire detector that includes two transmitter LEDs (2.1a, 2.1b) and two photodetectors (2.2a, 2.2b), with these components being arranged such that the photodetectors receive both the forward scattered radiations as well as the backward scattered radiations of the longer and shorter wavelengths separately from each other. A multi-channel evaluation circuit is provided downstream of the photodetectors.